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The International Nickel Company of Canada, Limited

1968

ANNUAL  
REPORT



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# The International Nickel Company of Canada, Limited

## 1968 ANNUAL REPORT

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*La traduction en français de ce rapport sera envoyée sur demande.*

# The International Nickel Company of Canada, Limited

as of February 18, 1969

## OFFICERS

*Chairman and Chief Officer*  
HENRY S. WINGATE

*President*  
ALBERT P. GAGNEBIN

*Senior Executive Vice-President*  
JAMES C. PARLEE

*Executive Vice-President*  
RICHARD A. CABELL

*Executive Vice-President*  
F. FOSTER TODD

*Assistants to the Chairman*  
PAUL QUENEAU  
ASHBY McC. SUTHERLAND  
JOHN H. PAGE

*Vice-Presidents*  
JOHN A. MARSH  
L. EDWARD GRUBB  
H. FRANKLIN ZURBRIGG  
JOHN O. HITCHCOCK  
WILLIAM STEVEN  
LOUIS S. RENZONI  
GLENN H. CURTIS

*Vice-President—Finance*  
CHARLES F. BAIRD  
*Secretary*  
WILLIAM F. KENNEDY  
*Comptroller*  
WALTER A. McCADDEN  
*Treasurer*  
F. M. A. NOBLET

*Assistant to the President*  
DEAN D. RAMSTAD

## DIRECTORS

### *Term Expires 1969*

JOHN J. DEUTSCH . . . . . Kingston, Ont.  
HON. LEWIS W. DOUGLAS . . . . . Sonoita, Ariz.  
J. ROY GORDON . . . . . New Fairfield, Conn.  
G. ARNOLD HART, M.B.E. . . . . Montreal, P. Q.  
J. K. JAMIESON . . . . . Mamaroneck, N. Y.  
R. SAMUEL McLAUGHLIN . . . . . Oshawa, Ont.  
H. C. F. MOCKRIDGE, Q.C. . . . . Toronto, Ont.  
THE RT. HON. LORD NELSON OF STAFFORD  
London, England  
SIR RONALD L. PRAIN, O.B.E. . . . . Lusaka,  
Zambia  
GEORGE C. SHARP . . . . . Katonah, N. Y.  
THE RT. HON. VISCOUNT WEIR, C.B.E.  
Glasgow, Scotland  
SAMUEL H. WOOLLEY . . . . . Morris Plains, N. J.

### *Term Expires 1970*

WILLIAM C. BOLENIUS . . . . . Cutchogue, N. Y.  
NORRIS R. CRUMP . . . . . Montreal, P. Q.  
ALBERT P. GAGNEBIN . . . . . Fair Haven, N. J.  
JAMES H. GOSS . . . . . Cleveland, Ohio  
ALLEN T. LAMBERT . . . . . Toronto, Ont.  
DONALD H. McLAUGHLIN . . . . . San Francisco,  
Calif.  
JAMES C. PARLEE . . . . . Bronxville, N. Y.  
ELLMORE C. PATTERSON . . . . . Bedford, N. Y.  
GEORGE T. RICHARDSON . . . . . Winnipeg, Man.  
LUCIEN G. ROLLAND . . . . . Montreal, P. Q.  
IVOR D. SIMS . . . . . Bethlehem, Pa.  
R. EWART STAVERT . . . . . Montreal, P. Q.  
HENRY S. WINGATE . . . . . New York, N. Y.

## EXECUTIVE COMMITTEE

HENRY S. WINGATE, *Chairman*

J. ROY GORDON	H. C. F. MOCKRIDGE, Q.C.
G. ARNOLD HART, M.B.E.	ELLMORE C. PATTERSON
ALBERT P. GAGNEBIN	

## ADVISORY COMMITTEE

R. SAMUEL McLAUGHLIN, *Chairman*

LANCE H. COOPER, M.B.E.	SIR OTTO E. NIEMEYER, G.B.E., K.C.B.
J. ROY GORDON	J. C. TRAPHAGEN
H. R. MACMILLAN, C.B.E.	HENRY S. WINGATE

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## COUNSEL

SULLIVAN & CROMWELL	OSLER, HOSKIN & HARCOURT
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## AUDITORS

PRICE WATERHOUSE & Co.

## TRANSFER AGENTS

CANADA PERMANENT TRUST COMPANY.....	Toronto, Ont.
THE ROYAL TRUST COMPANY.....	Montreal, P. Q.
MORGAN GRENFELL & Co. LIMITED.....	London, England
BANKERS TRUST COMPANY .....	New York, N. Y.

## REGISTRARS

MONTREAL TRUST COMPANY .....	Toronto, Ont.
MONTREAL TRUST COMPANY .....	Montreal, P. Q.
LLOYDS BANK LIMITED .....	London, England
MORGAN GUARANTY TRUST COMPANY OF NEW YORK.....	New York, N. Y.

## DIVIDEND DISBURSING AGENTS

BANKERS TRUST COMPANY .....	New York, N. Y.
MORGAN GRENFELL & Co. LIMITED.....	London, England

# Parent and Principal Subsidiary Companies

## THE INTERNATIONAL NICKEL COMPANY OF CANADA, LIMITED

*General Offices:* Copper Cliff, Ontario

*Toronto Office:* Toronto-Dominion Centre, Toronto 1, Ontario

## THE INTERNATIONAL NICKEL COMPANY, INC.

*General Offices:* 67 Wall Street, New York, N. Y. 10005, U.S.A.

## HUNTINGTON ALLOY PRODUCTS DIVISION

*New York Office:* 67 Wall Street, New York, N. Y. 10005, U.S.A.

*Huntington Office:* Huntington, West Virginia 25720, U.S.A.

## INTERNATIONAL NICKEL LIMITED

*General Offices:* Thames House, Millbank, London, S. W. 1, England

## HENRY WIGGIN & COMPANY, LIMITED

*General Offices:* Thames House, Millbank, London, S. W. 1, England

*Hereford Office:* Holmer Road, Hereford, England

*The headframe of the major new Shebandowan mine in north-western Ontario, silhouetted against a Canadian sunset. Full production at the mine, located on Lower Lake Shebandowan, is scheduled for 1972.*



# Principal Properties, Plants and Laboratories

## Producing Mines

SUDBURY DISTRICT, ONTARIO — Creighton, Frood-Stobie, Garson, Levack, Murray, Crean Hill, Clarabelle, Maclennan and Totten

THOMPSON DISTRICT, MANITOBA — Thompson and Birchtree

## Concentrators

SUDBURY DISTRICT, ONTARIO — Copper Cliff, Creighton, Levack and Frood-Stobie

THOMPSON, MANITOBA

## Smelters

COPPER CLIFF, ONTARIO — *Nickel oxide sinters*

CONISTON, ONTARIO

THOMPSON, MANITOBA

## Iron Ore Recovery Plant

COPPER CLIFF, ONTARIO — *Iron ore; soluble nickel oxide*

## Refineries

PORT COLBORNE, ONTARIO — *Nickel metal*

THOMPSON, MANITOBA — *Nickel metal; elemental sulphur*

COPPER CLIFF, ONTARIO — *Copper; gold, silver, osmium, selenium, tellurium; semi-refined platinum-group metals; nickel sulphate*

CLYDACH, WALES — *Nickel metal — pellet and powder; nickel and cobalt salts and oxides; iron powder*

ACTON (LONDON), ENGLAND — *Platinum, palladium, rhodium, ruthenium and iridium*

## Research Laboratories and Pilot Plants

SHERIDAN PARK, COPPER CLIFF AND PORT COLBORNE, ONTARIO

STERLING FOREST, NEW YORK, AND HARBOR ISLAND, NORTH CAROLINA, U.S.A.

BIRMINGHAM, ENGLAND, AND CLYDACH, WALES

## Rolling Mills

PLANTS — HUNTINGTON, WEST VIRGINIA, AND BURNAUGH, KENTUCKY, U.S.A.; HEREFORD, ENGLAND — *Wrought nickel and high-nickel alloys*

RESEARCH LABORATORIES — HUNTINGTON, WEST VIRGINIA, U.S.A.; HEREFORD, ENGLAND



*A rotary drill in operation at the Clarabelle open-pit mine in the Sudbury District, one of the Company's 11 producing mines in Canada.*

## Highlights

The Company earned \$143,745,000, slightly above the \$141,752,000 in 1967. Dividend payments to the shareholders, at the record rate of \$1.23 per share, totaled \$91,475,000. The Company's common shares were split on a 2½-for-1 basis.

Free world nickel consumption exceeded 800,000,000 pounds for the third consecutive year. Demand for nickel continued to be greater than the available supply.

The Company's deliveries of nickel amounted to 480,840,000 pounds, compared with 463,450,000 pounds in 1967.

Progress was made in expanding the capacity of the Company's ten producing mines in Ontario and Manitoba, and in bringing the eleventh — the Birchtree mine — into regular production promptly after the year end. Work started on the development of an important new mine at Shebandowan, Ontario — one of eight new mines being developed by the Company in Canada.

The Company announced it would build at Copper Cliff a nickel refinery at a cost of some \$80,000,000, with an annual capacity of 125,000,000 pounds of nickel pellets and powders.

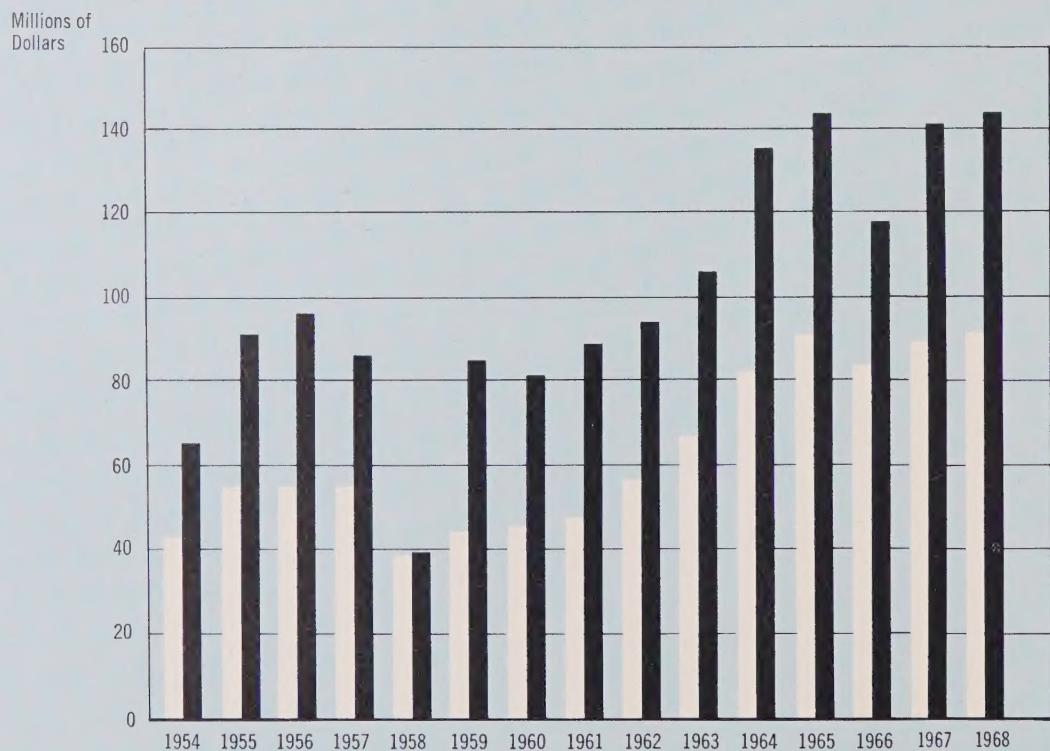
Capital expenditures in 1968, largely in connection with the mine and plant expansion program in Canada, were a record \$175,384,000. Capital expenditures in 1969 are expected to approximate \$200,000,000 for Canada, the United Kingdom and the United States.

The Company entered into an agreement with the Republic of Indonesia for exploration of nickel deposits on the island of Sulawesi, and their development if found economic.

## Financial Summary

	1968	1967	1966	1965
Net Earnings .....	\$143,745,000	\$141,752,000	\$118,170,000	\$143,794,000
Per Share*.....	\$ 1.93	\$ 1.90	\$ 1.59	\$ 1.94
Common Dividends..	\$ 91,475,000	\$ 89,104,000	\$ 83,059,000	\$ 90,311,000
Per Share*.....	\$ 1.23	\$ 1.20	\$ 1.12	\$ 1.22
Income Taxes .....	\$ 86,837,000	\$ 78,259,000	\$ 69,024,000	\$ 93,455,000
Capital Expenditures	\$175,384,000	\$145,705,000	\$ 73,037,000	\$ 62,737,000

Common Dividends  and Net Earnings  1954-1968



Dollar figures in this Report are expressed in United States currency, unless otherwise stated.

\*Adjusted for 2½-for-1 split effected July 18, 1968.

THE INTERNATIONAL NICKEL COMPANY OF CANADA, LIMITED  
(Incorporated Under The Laws of Canada)

AND SUBSIDIARIES

Copper Cliff, Ontario  
February 18, 1969

*To the Shareholders:*

Net Earnings Total  
\$1.93 Per Share

**NET EARNINGS** — The year 1968 was characterized by all-out efforts by the Company to crowd increased nickel production in order to meet its customers' needs. These efforts contributed to increased production costs, which were caused primarily by higher employment and supply costs and by the technical and operating problems presented as a result of increased dependence on ores of lower grade. Earnings were also adversely affected by a reduction of tax-exempt "new mines" income in Canada and by tax surcharges imposed by Canada and the United States. They were favorably affected by the higher deliveries of nickel of our own production and improved prices for nickel, copper and platinum-group metals.

Net earnings were \$143,745,000, or \$1.93 per share. They compare with \$141,752,000, or \$1.90 per share, in 1967. Income taxes for the year were \$86,837,000, compared with \$78,259,000 in 1967.

**DIVIDENDS** — The Company, which has paid quarterly dividends uninterruptedly for 35 years, paid a quarterly dividend of 28¢ per share in March and 30¢ per share in June, September and December. In addition, there was a year-end extra dividend of 5¢ per share, bringing total dividends for the year to a record \$1.23 per share, compared with \$1.20 in 1967. The dividends-per-share and earnings-per-share figures reflect a 2½-for-1 split of the common shares.

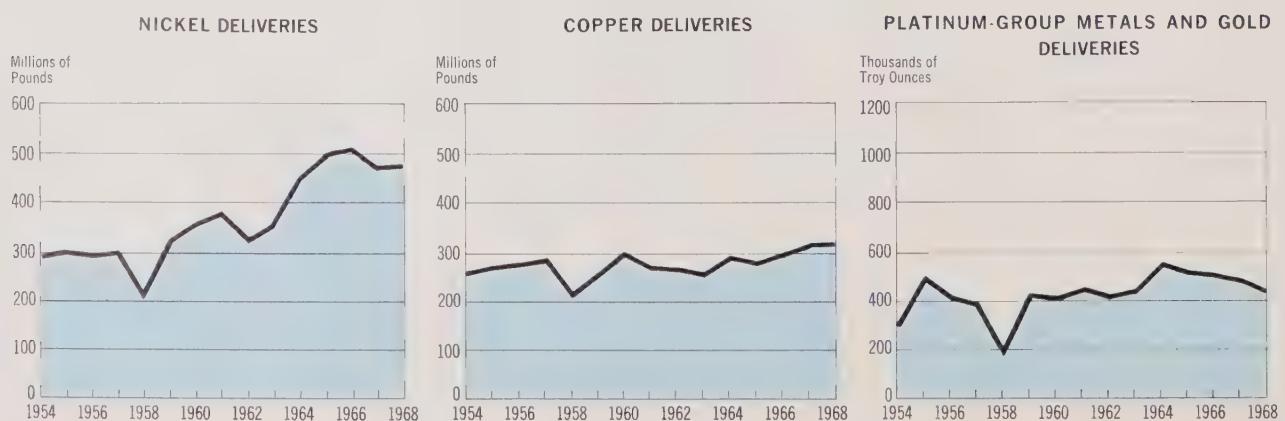
Total dividends paid in 1968 were \$91,475,000; in 1967, they were \$89,104,000.

\$1.23-Per-Share Dividend  
Establishes Record

# Deliveries of Metals

	1968	1967	1966	1965
POUNDS				
<b>NICKEL</b>				
Primary Nickel* .....	<b>415,520,000</b>	399,450,000	431,560,000	433,190,000
Nickel in Rolling Mill Products	<b>65,320,000</b>	64,000,000	68,640,000	59,770,000
Nickel in all forms — Total.....	<b>480,840,000</b>	463,450,000	500,200,000	492,960,000
<b>COPPER</b> .....	<b>314,160,000</b>	310,930,000	293,000,000	275,880,000
<b>COBALT</b> .....	<b>1,790,000</b>	2,210,000	2,000,000	2,020,000
TROY OUNCES				
<b>PLATINUM-GROUP METALS</b>				
AND GOLD .....	<b>440,900</b>	475,600	500,900	510,800
<b>SILVER</b> .....	<b>1,607,000</b>	1,592,000	1,513,000	1,581,000
LONG TONS				
<b>IRON ORE</b> .....	<b>654,000</b>	708,000	673,000	889,000

\* Including salts and chemicals, and rolled bars for electroplating.



Common Shares  
Split 2½-for-1

Company's  
Nickel Deliveries:  
480,840,000 Pounds

Free World Nickel  
Consumption Surpasses  
800,000,000 Pounds

**SHARE SPLIT** — At a special general meeting in Toronto on July 17, shareholders approved the 2½-for-1 split of the Company's common shares. This became effective on July 18, 1968. The split, as sought for by the Board of Directors, has served to broaden ownership of the Company's shares, particularly in Canada.

**DELIVERIES OF METALS** — In 1968, the first effects of the current Canadian expansion program began to be felt as International Nickel delivered 480,840,000 pounds of nickel in all forms, compared with 463,450,000 pounds in 1967. As in previous years, deliveries included nickel purchased from various sources and delivered to customers on a no-profit basis. The amount of this purchased nickel was considerably less than in 1967.

Copper deliveries in 1968 of 314,160,000 pounds slightly exceeded the 310,930,000 pounds delivered in 1967.

Deliveries of the platinum-group metals (platinum, palladium, rhodium, ruthenium, iridium and osmium) and gold were 440,900 troy ounces in 1968, compared with 475,600 troy ounces delivered in 1967.

Iron ore deliveries were 654,000 long tons, compared with 708,000 long tons in 1967.

The table on the opposite page shows the deliveries of the Company's principal metals for the past four years. In addition to these metals, selenium, tellurium and sulphur are also recovered from the Company's ores.

**NICKEL CONSUMPTION** — Nickel consumption in the free world maintained the same high level as in 1967 and marked the third consecutive year in which it exceeded 800,000,000 pounds. This represents an increase of more than 200,000,000 pounds over the average for 1961-1965.

The Company noted no significant shifts in the pattern of consumption by major fields of nickel application in 1968 compared with the previous year. Its estimates indicate that stainless steels accounted for 37% of total free world consumption; nickel plating, 15%; high-nickel alloys, 14%; constructional alloy steels, 11%; iron and steel castings, 10%; copper and brass products, 3%; and all others, 10%. Geographically, consumption of nickel from all sources appeared generally to have followed traditional patterns, except for a decrease in the United States. This decrease is largely accounted for by the greatly reduced availability of U.S. Government surplus nickel which in previous years had been put into the market in the United States.

## Nickel in Short Supply

The imbalance between supply and demand continued throughout 1968 and is persisting. It is necessitating the continuation by the Company of worldwide distribution of its nickel on an equitable allotment basis patterned on historical deliveries. In 1969, as the nickel industry's production rises, consumption can be expected to rise accordingly. But, barring major changes in the free world economy, nickel is likely to remain in short supply. The shortage is not expected to have important adverse effects on the long-term growth of nickel consumption.

## Nickel Prices Increased

**NICKEL PRICES** — On December 27, the Company increased the price of its nickel products because of very significant increased costs it had experienced and as a necessity for carrying forward its large expansion program. The Company's price for regular electrolytic nickel became \$1.03 (U.S.) per pound, an increase of 9¢ per pound. For Canadian consumers the new price became \$1.11½ (Can.). The price in the United Kingdom for electrolytic nickel, and for refined nickel pellets produced at the Company's Clydach, Wales, refinery, became £986 per long ton. Corresponding increases for other nickel products were also put into effect.

**OTHER METAL PRICES** — *Copper*: After similar action by most other Canadian producers, the Company on January 10, 1969 increased the price of its "ORC" copper sold in Canada to 48½¢ (Can.) per pound. The price had been 51¢ (Can.) for the first half of 1968, falling on July 3, 1968 to 45¢ per pound.

## Other Metal Price Changes

On June 3, the pricing of the Company's copper sold in European markets was put on the basis of the London Metal Exchange spot wirebar asked quotation, instead of the LME 3-month sellers' quotation. Similar action was taken by Zambian and Chilean, and other Canadian copper producers. The price at which the Company's copper was sold in overseas markets during the year ranged from 45¢ (U.S.) per pound to 74¢ (U.S.) per pound. The Company sold none of its copper in the United States.

**Platinum-Group Metals**: Industrial demand for most platinum-group metals remained strong during 1968. Platinum continued in tight supply despite some further increases in free world production. The January 1968 platinum average published price of \$111.50 (U.S.) per troy ounce remained unchanged until it increased to \$122.50 on July 1. The average published price for palladium in the United States increased from \$38 per troy ounce to \$46 during 1968; rhodium, ruthenium and iridium prices remained unchanged during the year at \$247.50, \$57.50, and \$187.50, per troy ounce, respectively.

*Ninety-five railway cars were required to transport this huge dredge to the Thompson area in Manitoba. It is removing overburden, as deep as 150 feet, in the process of developing the new Pipe mine.*





*The permanent headframe was completed during the year for the No. 1 shaft of the Coleman mine, one of eight new mines being developed in Canada.*

**Gold:** As a result of the two-price system which came into effect in March, the Company received increased prices for its gold. The market price on March 19 was \$39.50 (U.S.) per troy ounce; it increased to a high of \$42.65 on May 20; and on December 31, it was \$42.05.

**Silver:** The New York price for refined silver, which was \$2.10 per troy ounce as 1968 began, reached an all-time high of \$2.565 on June 12 and at year end was \$1.90.

#### Ore Production Increased 20%

**PRODUCING MINES** — Total ore production from the Company's mines in Ontario and Manitoba rose to a record 24,350,000 dry short tons, which surpassed by some 20 per cent the former mark set in 1967. This record was made possible, despite a shortage of labour, by an accelerating program of mechanization of underground mining operations; new ore recovery techniques, such as "ramp mining"; and expanded operations at the producing mines.

#### Expansion of Producing Mines Continues

To maintain and increase production, shaft sinking and development work moved forward at a number of operating mines. In total, five shafts were being sunk or deepened during the year, and underground development in the operating mines reached a total of 3,854,000 feet, or 730 miles, an increase of some 335,000 feet, or 63 miles, over the previous year.



*A new 48-mile Company railroad will link the Soab and Pipe mines to the ore-processing complex at Thompson. Hauling operations on the line will begin early in 1969.*

#### Nickel-Producing Capacity in Canada to Increase 30%

#### Six Ontario Mines Under Development

**DEVELOPMENT OF NEW MINES IN CANADA**—During the year the Company pushed forward its major capital program—the largest in its history—to expand progressively its nickel-producing capacity in Canada to a rate of over 600,000,000 pounds annually by the latter part of 1971, an increase of more than 30 per cent. The program involves the development of eight new mines—five in the Sudbury District of Ontario, two in Manitoba, and one at Shebandowan, Ontario—as well as investments to expand and modernize existing underground and surface facilities.

In the Sudbury District, shaft sinking, underground development and construction of surface facilities were pushed ahead at five new mines. Two of these—the Little Stobie and Kirkwood mines—are expected to start producing in 1969. Production at the Coleman mine will be initiated in early 1970, while the Copper Cliff North mine will be in full production in that year. Initial production from the fifth new mine—Copper Cliff South—is scheduled for 1971.

In April, the Company announced its decision to develop an important new mine and supporting facilities at Shebandowan, at a cost of over \$30,000,000. The production shaft will be sunk to a depth of 2,375 feet on the south shoreline of Lower Lake Shebandowan, and a concentrator will be built about a quarter mile from the mine's headframe. Production is scheduled for 1972, at 2,900 tons of ore per day.

In Manitoba, the new Birchtree mine, a major addition to the Thompson complex, came into regular production promptly after the year end. Surface work and shaft sinking went forward at the Soab mine which will be in production in 1969. At the Pipe mine, which will come into production in late 1971, dredging of overburden for open-pit mining was about two-thirds completed and shaft sinking for the underground portion of the mine continued. During the year a 48-mile railroad was completed to link the Soab and Pipe mines to the Company's ore-processing complex at Thompson. By the latter part of 1971, the Company's Manitoba facilities will have an annual production capability of 170,000,000 pounds of nickel.

**PLANT EXPANSION AND IMPROVEMENTS**—In order to handle the increased tonnages of ore resulting from the mine expansion and development program, the Company is concurrently adding to and modernizing its processing facilities in Canada and the United Kingdom.

In Canada, work began during 1968 on a nickel refinery at Copper Cliff for the production of high-purity nickel pellets and powders by means of a major new International Nickel-developed process. The highly automated plant will cost approximately \$80,000,000, and it will utilize the



Indonesia's Minister of Mines, Prof. Dr. Ir. Soemantri Brodjonegoro, and Chairman Henry S. Wingate signed an agreement on July 27 in Djakarta under which P. T. International Nickel Indonesia will explore and develop, if economic, nickel deposits on the island of Sulawesi.

**IPC Plant Capacity:  
125,000,000 Pounds  
of Nickel**

Inco Pressure Carbonyl (IPC) process, a far-reaching development in chemical metallurgy, for treating sulphide concentrates and metallurgical intermediates. Scheduled for completion in the latter part of 1971, the plant will have an annual nickel capacity of 100,000,000 pounds in the form of pellets and 25,000,000 pounds in the form of powders. The IPC complex will also produce copper, cobalt and sulphur, and will centralize at Copper Cliff the Company's precious metals concentrating operations.

Major expansion of the iron ore recovery plant at Copper Cliff went forward and will be completed in 1970, a most important contribution of which will be increased over-all nickel producing capacity. The iron ore plant, by separately treating large amounts of nickeliferous pyrrhotite present in the ore, effectively increases both the Company's smelting capacity and its nickel recovery efficiency.

Revisions to the Copper Cliff mill, required to process the bulk concentrate pumped from the Frood-Stobie mill, were completed. Work began on a fourth roasting unit and ancillary facilities at the fluid bed roaster nickel oxide plant to accommodate increased nickel production at the Copper Cliff smelter.

In the United Kingdom, modernization of the Clydach, Wales, nickel refinery was continued. Installation of a second rotary kiln carbonyl production line was started, as were facilities to increase capacity for the production of hydrogen and carbon monoxide, which are essential process reactants.

The modernization program at the Acton precious metals refinery near London, begun in 1967, was carried to conclusion during the year. The plant, which now has increased production capacity, is in full operation, producing platinum, palladium and rhodium of very high purity.

**Worldwide Concern  
with Pollution**

**ENVIRONMENTAL CONTROL** — There is increasing worldwide concern with pollution of the environment, and during the year the Company's operations in the Sudbury District were subjected to criticism on this score. Because of their very size, these operations present difficult environmental control problems. During the year much work was done to further control or eliminate the discharge of various pollutants into the air and water of the area. Progress was substantial and promises to be more so in the future.

The Company's continuing program of growing grass on the tailings areas — some 500 acres are now under grass — and thus controlling dust, attracted considerable favorable attention during the year from other mining companies, the press in Canada and abroad, and government officials.

Indicative of the progress in conserving water is the fact that despite the increased water need as a result of heavy expansion, the Company in the Sudbury area is drawing the same amount of water as in 1964. This progress has been accomplished by the increased use of water, as at the new Frood-Stobie mill which, while requiring 11,500,000 gallons a day, draws and recycles its water from the general tailings area. This results in conserving more water than is consumed by the entire population of 85,000 of the City of Sudbury. Clarification and neutralization facilities are now being extended to all mines to ensure that water discharged into natural water courses will not contaminate them.

*The Exmibal plant site on Lake Izabal, Guatemala, seen from the point where the first mine will be opened. Temporary accommodations for construction workers are at the left. In front of the plant site is a cleared area where an access canal for barges will be built.*



## Company to Build World's Tallest Chimney

To deal with the problem of sulphur dioxide emitted from the Copper Cliff smelter, the Company announced in February 1969 that it will erect a 1,250-foot chimney to replace the existing chimneys, two of 500 feet and one of 350 feet. The new chimney will be the highest in the world, about the same height as the Empire State Building, and will assure that the air in the Sudbury District will be cleaner than in any other industrial urban community in Ontario. This stack will always provide important advantages, but additionally the Company is continuing its studies and research aimed at more extensive recovery of sulphur from smelter gases and process changes which will reduce the generation of such gases. Additional dust collection equipment will also be installed and, along with similar equipment installed at the Coniston smelter in 1968, will keep particulate emission of pollutants to a very minor level. The cost of the chimney and the related dust collection equipment will be about \$13,000,000.

## Research Speeding New Extractive Processes

**PROCESS RESEARCH** — The J. Roy Gordon Research Laboratory in Sheridan Park, near Toronto, completed its second year of operation with gratifying results. Its activities, combined with those of the three research stations at Port Colborne, Ontario, greatly speed transition of new extractive metallurgy concepts from laboratory investigation to commercial realization. The IPC process, for example, was successfully demonstrated on a tonnage basis at the research station complex. The Company now has pilot facilities covering the full spectrum of operations in chemical metallurgy, ranging over the fields of hydrometallurgy, pyrometallurgy and vapometallurgy. The continuing efforts of laboratory and research station personnel are directed toward better methods for the treatment of both sulphide ores and concentrates and lateritic ores of nickel. Special attention is being given to the ores of Minnesota, New Caledonia, Indonesia and Australia.

## Prospects for Two New Canadian Mines

**OTHER MINING PROJECTS** — International Nickel's exploration activities in Canada and in various other parts of the world have brought to the Company's attention a number of nickel deposits that hold the potential of becoming new mining projects in the future.

In Canada, underground work will proceed in 1969 which may result in the development of a new mine at Victoria in the Sudbury District, where an old mine was last worked in 1923. An estimated 100,000,000 gallons of water will be pumped out of the former mine site to permit investigation below the old workings. Another prospect is in the North

## Prospects Outside of Canada

Range area, also in the Sudbury District, where an exploration shaft was completed during the year to its planned depth of 3,175 feet.

Progress was made on the Company's Guatemalan project through its majority-owned subsidiary, Exploraciones y Explotaciones Mineras Izabal, S.A. (Exmibal). However, the decision to start construction of the \$180,000,000 mining and processing facilities, capable of producing at least 50,000,000 pounds of nickel annually, has not been made because final resolution of necessary arrangements with Guatemalan authorities is still pending.

Negotiations with our French partners have gone forward successfully to give expression to the joint preliminary agreement approved by the French Government in 1967. This agreement calls for the Company to be a partner with a 40 per cent equity interest in a new company to be established with a consortium of various French Government-owned and private companies and banks, with the intent of developing presently untapped New Caledonian nickel ores. The negotiations were concerned



*An exploration drill at work in Australia, one of the many areas where the Company is pressing its search for new nickel deposits.*

### Company Organized in Indonesia

with the detailed arrangements governing the establishment, organization and operation of the company, to be known as Compagnie Francaise Industrielle et Miniere du Pacifique (Cofimpac). These now await the final approval of the French Government. While these negotiations were being conducted, joint exploration activities were carried out in New Caledonia, as were process research and pilot plant work on New Caledonian ores. Cofimpac's initial objective is to add 50,000,000 to 100,000,000 pounds of nickel annually to the world's supply.

In July, the Company entered into an agreement with the Republic of Indonesia for the exploration and development, if economic, of nickel deposits in an initial 25,000-square-mile area on the island of Sulawesi. P. T. International Nickel Indonesia was organized to conduct the operation, and exploration work is well under way.

Near Ely, Minnesota, The International Nickel Company, Inc., the United States subsidiary of the Company, completed sinking of a shaft to determine mining costs and to extract bulk ore samples, which are being tested in furtherance of the Company's efforts to develop this low-grade copper-nickel deposit.

### Exploration Expenditures at Record \$17,028,000

**EXPLORATION** — The Company's worldwide exploration for nickel and other metals in 1968 was the most extensive in its history. Exploration expenditures for the year totaled \$17,028,000, compared with the previous record of \$13,252,000 spent in 1967. Over 70 per cent of the 1968 outlays was made in Canada. Exploration activities in 1969 will be more extensive and follow a similar geographical pattern.

### Exploration in Canada

Underground exploration programs and complementary surface drilling in the Sudbury, Thompson and Shebandowan areas went forward. Elsewhere in Canada, notably in other parts of Ontario and Manitoba, as well as in Quebec and Saskatchewan, exploration continued at a steady rate. Most of this work was carried out independently by the Company and mainly for nickel; but some was done in partnership with other organizations and some involved other metals. International Nickel continued as one of a number of private participants in Panarctic Oils Ltd., which, with the Canadian Government as the major participant, is involved in the search for oil and minerals in Canada's Arctic region.

### Exploration in South Pacific

Much of the foreign exploration was centered in the South Pacific area. Major programs are being carried out in New Caledonia with French partners; and in Australia in participation with The Broken Hill Proprietary Company Limited. In Western Australia, the Company has encountered sulphide mineralization in the Kalgoorlie area, but commercial tonnage has

not been outlined to date. The commercial status of lateritic deposits at Wingellina, Western Australia, and at Rockhampton, Queensland, continues to be evaluated by the Company.

Exploration was initiated in Indonesia promptly following completion of the agreement with the Republic of Indonesia. Also in the South Pacific area, exploration and property examinations were carried out in the British Solomon Islands Protectorate, Papua, New Guinea, and New Zealand.

In Central America, general exploration was carried out in Guatemala and in Panama, Costa Rica and elsewhere.

The Company continued its special studies of nickel-bearing deep sea nodules as a future source of commercial nickel.

#### Ore Reserves Increased

**ORE RESERVES**—The Company's exploration and mine development programs in the Sudbury, Thompson and Shebandowan areas outlined sufficient new ore to increase reserves above 1967. The proven ore reserves of the Company in Canada stood at 370,970,000 dry short tons at December 31, containing 6,120,000 short tons of nickel and 3,890,000 short tons of copper. At the end of 1967, they were 357,570,000 dry short tons, containing 5,980,000 short tons of nickel and 3,820,000 short tons of copper.

The Company reports as proven ore reserves only blocks of ore which have been defined by drilling and by sampling, in accordance with its standard practice, in sufficient detail to enable calculation of the number of short tons of ore and its nickel and copper content.

#### Concentration on Longer-Range Markets

**PRODUCT RESEARCH AND MARKET DEVELOPMENT**—Until nickel supply more nearly comes into balance with demand, the Company is concentrating its product research and development activities on longer-range markets.

Efforts at the products research laboratories are being directed toward expanding technical knowledge so that nickel-containing materials meeting the most advanced requirements of industry can be developed. Research led to the introduction of a number of new alloys in 1968. Cast nickel-base superalloys with temperature capabilities equivalent to those of the strongest alloys now available, but with much better hot corrosion resistance, were introduced to jet engine producers. The development of a new wrought blading alloy of even greater resistance to corrosion and of relatively high strength will help widen the use of gas turbines in both marine and land-based applications, and a new sheet alloy highly resistant to cyclic oxidation is expected to contribute to the further development of automotive gas turbines. Another important development was the Company's introduction to the steel industry of new high-strength stainless steels

## Modern Technology Expanding Nickel Uses

that combine the advantages of outstanding strength and toughness, and the simple heat treatment characteristic of the maraging steels, with a significant level of corrosion resistance. During the year, too, the family of wrought 18 per cent nickel maraging steels was brought to strength levels as high as 400,000 pounds per square inch.

The Company's market development activities were principally concerned with the use of nickel in such growing markets as cryogenic applications, the commercial aircraft and aerospace industries, air and water contaminant control equipment, desalination applications, the petrochemical industry, and the automotive industry. Special efforts were made to strengthen the position of 3½ per cent and 9 per cent nickel steels and stainless steels for marine and land-based transport and storage systems for liquefied gases. Another nickel-containing material entered the cryogenic market when the 36 per cent low-expansion nickel-iron alloy was specified for the new cargo tanks designed for liquid methane tankers being built in Sweden. Commercial aircraft are becoming increasingly important as a

(continued on page 26)

*This hydrogen plant is part of the Company's nickel refining complex at Clydach, Wales. Modernization of the refinery was continued during the year.*





Airborne geophysical technician



Environmental control engineers

## INTERNATIONAL NICKEL...

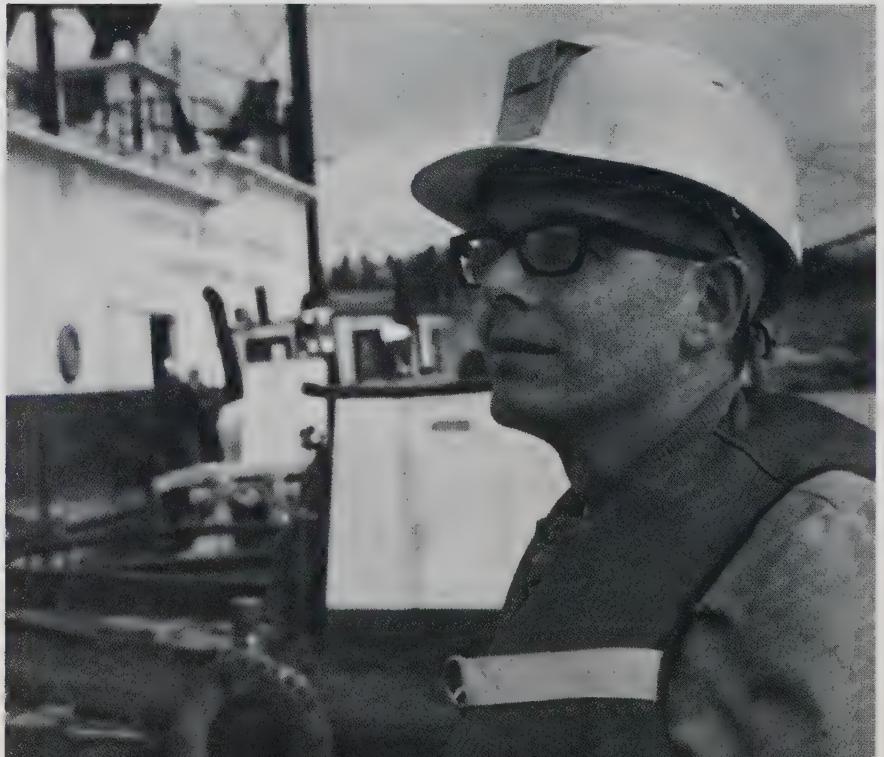
### Developer of Resources

*Nickel in the ground is useless. We put it to work. The men on this page symbolize the thousands of Inco people whose job it is to explore for new deposits . . . to develop ore bodies into mines . . . to devise improved mining techniques . . . to develop more efficient processes for extracting nickel and other elements from our ores . . . in a word, to work the earth constructively.*

Process research metallurgist



Mining engineer





Application engineer

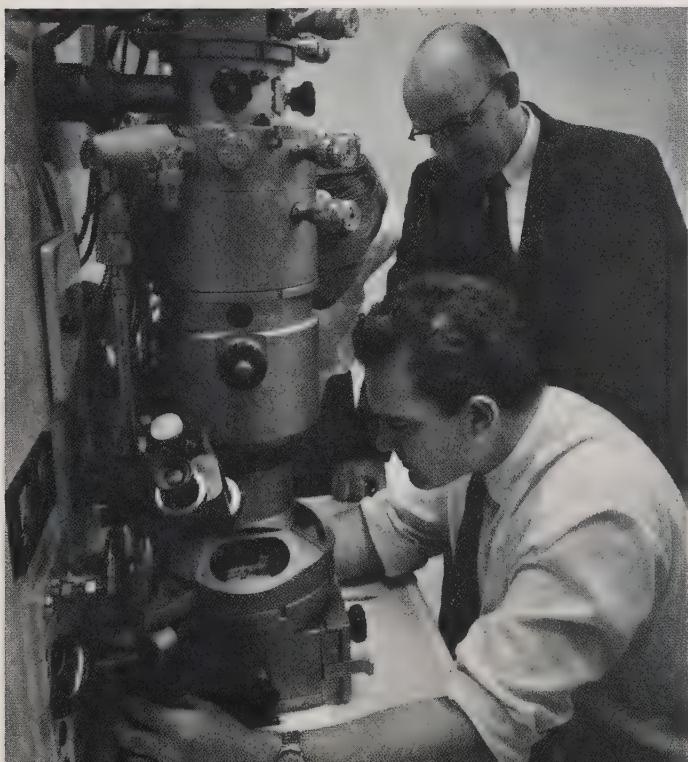


Corrosion specialist

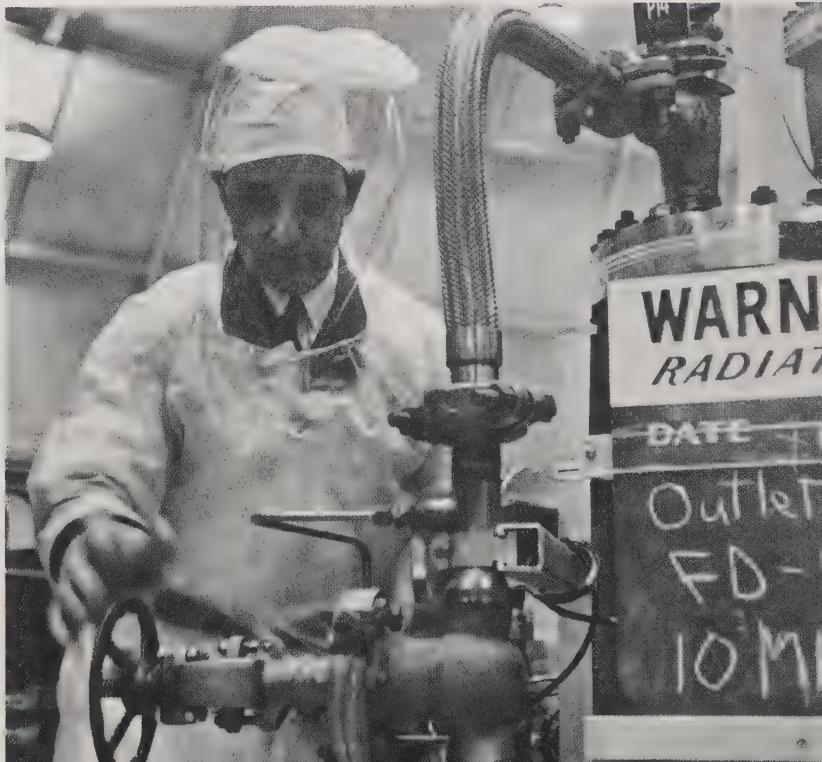
## Developer of Markets

To broaden the effective use of nickel, Inco research scientists develop and improve nickel-containing materials . . . Inco engineers provide technical assistance to producers and users of nickel materials . . . application engineers work with customers and with customers' customers to develop and promote nickel-containing products. A few of the Company's some 500 "market makers" are shown here.

Product research metallurgists



Nuclear power expert





*The Company has developed a method of growing grass on tailings, finely crushed rock from the initial stages of nickel ore processing. Over 500 acres of tailings in the Sudbury area have been converted to pasture land.*

market for both superalloys and stainless steels. The new Boeing 747, for instance, contains 11,000 pounds of nickel in airframe and engine components. The Boeing 2707, known as the SST, is expected to contain about 18,000 pounds of nickel. In the United Kingdom, the selection of the Rolls-Royce advanced-technology engine for the Lockheed 1011 trijet airbus will lead to a steadily increasing demand for Company-developed high-nickel alloys. These are employed on the Anglo-French Concorde SST, which contains 15,000 pounds of nickel.

A new ruthenium compound developed by the Company's research scientists has overcome difficulties which previously limited severely the electrodeposition of ruthenium. As a result high-quality deposits of ruthenium are available for various industrial uses, including electrical contacts.

Coinage, an old but important use for nickel, continued to grow as a market for the metal during the year. Practically all the countries of the

#### Nickel Replaces Silver in Coinage

world have now abandoned silver as a coinage metal and most have replaced it with pure nickel or nickel alloys. Among the changeovers to nickel materials in 1968 were Canada, Sweden, Switzerland, Egypt, the Dominican Republic, Macao, the Netherlands and Brazil. Production of cupro-nickel coins for the United Kingdom decimalization program reached a high level during the year as the first new British decimal coins were issued.

**Rolling Mill Deliveries Show Increase**

**ROLLING MILL DIVISIONS** — Deliveries of nickel products by the Company's rolling mill divisions in the United States and the United Kingdom totaled 96,790,000 pounds in 1968, compared with 95,860,000 pounds in the previous year. The total nickel in these products was 65,320,000 pounds, compared with 64,000,000 pounds in 1967. The mills, by substantially reducing their finished goods and in-process inventories, helped stretch the total nickel supply and thus made this increase possible. While deliveries from the rolling mill in Hereford, England, to the United Kingdom were down, for all markets combined they increased over the prior year. They set an export record. Deliveries from the Huntington, West Virginia, plant declined somewhat for 1968 as a whole, but during the latter part of the year deliveries and incoming orders improved substantially.

During the year, a new \$30,000,000 construction and equipment program at the special products facility at Burnauah, Kentucky, was announced. The new operating additions will provide full-scale production capability for vacuum induction melting and hot extrusion of tubing.

**Participation in Joint Ventures**

**OTHER PROJECTS** — During the year, the Company acquired a 10 per cent interest in Impala Platinum Limited (an affiliate of the Union Corporation Limited), which is building a new platinum-group metals mining, smelting and refining establishment in South Africa. International Nickel is providing technical assistance on the platinum refining aspects of the project. Production of platinum is scheduled to begin at an initial rate of 100,000 troy ounces per year.

Also in 1968, the Company sold its equity interest in Heath Steele Mines Limited, and thereafter secured a 25 per cent interest in a joint venture agreement with that company for the production of zinc, lead and copper concentrates in New Brunswick, Canada.

**Capital Expenditures Total \$175,384,000**

**CAPITAL EXPENDITURES** — Capital expenditures during the year were a record \$175,384,000, compared with the previous high of \$145,705,000 in 1967, and with \$73,037,000 in 1966. Expenditures in Canada were \$142,370,000, compared with \$130,817,000 in 1967, and \$55,199,000 in 1966.

**Debentures and Loans**  
**Provide Expansion Capital**

Capital outlays in 1968 included \$72,273,000 for mine development expenditures in Ontario and Manitoba. Expenditures for the expansion and improvement of the Company's smelting and refining plants in Canada and the United Kingdom totaled \$68,383,000. New facilities at the Company's rolling mills in the United States and the United Kingdom accounted for \$21,274,000. The balance of \$13,454,000 was expended for other capital items.

Capital expenditures are expected to approximate \$200,000,000 in 1969 for Canada, the United Kingdom and the United States. For Canada alone they are expected to exceed \$150,000,000.

**EXTERNAL FINANCING** — To help finance its current and projected capital expenditure programs and to augment its working capital, the Company entered into a number of financing arrangements during the year.

On March 28, it sold \$150,000,000 of 6.85 per cent debentures due in 1993. The Company received \$137,000,000 of these funds in 1968 and the remaining \$13,000,000 in January, 1969. The debentures are listed on the New York Stock Exchange.

In June, the Company's United States subsidiary, The International Nickel Company, Inc., arranged a \$75,000,000 revolving credit with a group of United States and Canadian banks. At year end, \$25,000,000 had been drawn down under this arrangement.

In September and October, another subsidiary, International Nickel Projects Limited, borrowed a total of Swiss Francs 70,000,000 (\$16,300,000).



*Fifty-seven denominations of coins were issued in nickel and nickel alloys for the first time in 1968 by 28 nations. A sampling is shown here, including Canada's 5¢, 10¢, 25¢, 50¢ and dollar pieces of pure nickel.*

**Employees  
Number 33,314**

On December 23, the Export-Import Bank of the United States approved a \$70,000,000 credit to Exmibal, the Company's majority-owned Guatemalan affiliate. These funds will be available to finance procurement of materials, supplies and services to be used in the development of the Guatemalan property. The availability of the Export-Import Bank credit is contingent upon the satisfactory completion of negotiations which are under way between Exmibal and Guatemalan authorities.

**EMPLOYEES —** At the end of 1968, the Company and its subsidiaries had 33,314 employees distributed over 18 countries as follows: Canada, 24,378; United Kingdom, 4,671; United States and other countries, 4,265. Of these, 4,610 have served for more than 25 years and are members of the Company's Quarter Century Club.

While the shortage of labour at the Company's operations in Ontario and Manitoba persisted, progress was made in meeting manpower needs. The labour shortage is directly related to the scarcity of housing, and the Company has put forth increased efforts to encourage private construction at its operations sites. As a result, new housing starts at Thompson in 1968 included 227 single-family homes, 255 apartments and 480 units for single men. Work also began on a new 39-room motor hotel and a new neighborhood shopping center, both scheduled for completion early in 1969.

In the entire Sudbury District, housing starts by private contractors during the year were limited to some 750 units.

After a special study and recommendations by the Directors, the shareholders, at a special general meeting in Toronto on July 17, approved a key employees incentive plan—a flexible program allowing for incentives in a number of forms. The conditions and actual awards and options are determined by an appointed committee of Directors, none of them Company officers.

**Share Split  
Increases Number  
of Shareholders**

**SHAREHOLDERS —** The number of shareholders of record at December 31 was 75,587, compared with 64,207 at the previous year end. Most of the increase took place after the 2½-for-1 share split in July. In the latter part of the year, the Company's records of shareholder addresses showed 54% of the shareholders to be in Canada, 43% in the United States, and 3% elsewhere; and 28% of the shares to be held by those in Canada, 58% in the United States, and 14% in the rest of the world.

## Directors

**MANAGEMENT CHANGES** — On November 4, George T. Richardson of Winnipeg was elected a Director of the Company. Mr. Richardson is President and a Director of James Richardson & Sons, Limited, Winnipeg. He is Chairman of The Great-West Life Assurance Company, and a Director of Canadian Imperial Bank of Commerce and Hudson's Bay Company.

On December 2, J. K. Jamieson, President and a Director of Standard Oil Company (New Jersey), and Vice-Chairman of its Executive Committee, was elected a Director of the Company. Mr. Jamieson has had extensive experience in Canada and the United States in various affiliates of Standard Oil Company (New Jersey). He is a Director of the Chase Manhattan Bank.

On January 6, 1969, Ivor D. Sims, Executive Vice-President and a Director of Bethlehem Steel Corporation, was elected a Director of the Company. A member of Bethlehem Steel's Board of Directors since 1957, Mr. Sims has served on the ferro-manganese industry advisory committees of a number of government agencies. He is a member of the Board of Trustees of Lehigh University.

On July 17, The Honourable James A. Richardson, who had been a member of the Board of Directors since 1960, resigned as a Director of the Company soon after being elected to the Canadian Parliament in the general election. He is a Minister without Portfolio in the Canadian Government.

## Officers

Dr. William Steven was elected Vice-President, Process Technology and Product Development, of the Company on July 1. At the same time, Louis S. Renzoni, Vice-President and Manager of Process Research, Canada, was named Vice-President, Process Research.

On August 5, Glenn H. Curtis, former President and Chief Officer of Stone & Webster Canada Limited, Toronto, was elected a Vice-President and Chief Engineer of the Company.

On October 1, L. Edward Grubb was elected a Vice-President of the Company and Chairman of International Nickel Limited, the Company's United Kingdom subsidiary. Mr. Grubb succeeds Thomas W. Childs, C.B.E., a Vice-President who retired from both companies.

On January 21, 1969, John H. Page was elected Assistant to the Chairman of the Company. Mr. Page continues as a Vice-President of the Company's United States subsidiary, The International Nickel Company, Inc.

Charles F. Baird, Under Secretary of the Navy in the Johnson Administration and formerly a financial executive of Standard Oil Company (New Jersey) in New York, London and Paris, was elected Vice-President—Finance, effective February 1, 1969.

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During the year the Company suffered the sad loss of two of its Directors.

Dr. John Fairfield Thompson, Honorary Chairman of the Board of Directors, and former Chairman and President, and a Director of the Company since 1931, died on July 13. Excerpts from the memorial resolutions adopted by the Board of Directors at its August 5 meeting follow:

*His contribution to the Company since he first became an employee 62 years ago can hardly be measured. Those years span the entire period of the development of the nickel industry and the rise of the Company from simple and obscure beginnings to the great world enterprise it has now become. This was his lifework and no one made a greater contribution than he.*

*His achievements in scientific and managerial fields were recognized far beyond the nickel industry and the Company itself. He was the recipient of many honors—the honorary degrees of Doctor of Science from Columbia University; Doctor of Laws from Queens University, Kingston, Ontario and from Bowdoin College, Maine; and Doctor of Humane Letters from Marshall College, Huntington, West Virginia. He was made a Commander in the Order of the White Rose (Finland).*

*With imagination and a sense of responsibility to provide for the years ahead he encouraged the search for new nickel deposits in many places throughout the world. One result of this program was the major discovery of the Thompson mine in Manitoba, named for him as was the town site established nearby and which now with foresight in town planning has become an attractive and growing municipality.*

William K. Whiteford, a Director of the Company since 1960, died on September 11. The Board of Directors at its October 7 meeting recorded a memorial resolution in the permanent records of the Company; an excerpt follows:

*The Board of Directors of The International Nickel Company of Canada, Limited record with deep sorrow the untimely death of their distinguished fellow Director, William K. Whiteford. From his experience as an oil executive and a successful industrialist he gave forceful assistance to the management of the Company during his eight years of service as a Director. His wisdom and skill, his personal charm and his devotion to his friends and family won for him the sincere friendship of this Board as well as the Officers.*

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## OUTLOOK

In many ways similar to 1967, the year 1968 was one of building for the future. Our major expansion program in Canada began to show results in increased production but has been disappointing in that the increase in production has come more slowly than we had intended. This has meant we have not been able to significantly increase the amount of nickel we have been allocating to our customers. It is a testimony to their ingenuity and the versatility of nickel that they have been able to continue production levels so that there have been no significant shortages of nickel-containing end products in the marketplace.

In our effort to develop new ore bodies outside of Canada to supplement our deposits there, 1968 was marked by significant progress and one delay. The delay was a result of our inability as yet to finalize all the neces-

sary arrangements with the Guatemalan Government and thus to be able to begin large-scale construction of mining and processing facilities in Guatemala. We had hoped to be able to do this in 1968.

Elsewhere our efforts were more successful. We entered into an agreement with the Republic of Indonesia covering the nickel deposits in a large area of the island of Sulawesi. Our exploration work there is well under way. It would give us great satisfaction to contribute to the economic development of this highly important area of the world.

Negotiations have moved ahead to finalize the plan for the organization and operation of the new company with French partners to develop New Caledonian ores while, concurrently, material progress was made in exploration work in New Caledonia and in the required research and pilot plant work.

In a number of other ways we are continuing to build for the future. We have made progress in reorganization of some of our operations, utilizing existing strengths to increase our effectiveness, as well as attracting new talents to the Company.

The markets for nickel-containing products are strong. They are expected to remain so for many years. This is based on continuing product development programs on which we and our customers are engaged and which we believe will result in the growth of nickel markets more rapidly than the growth of the world's economy generally. The immediate and pressing need is for increased production. While we do not expect supply and demand soon to come into balance, we do expect to increase our own production considerably more by the latter part of 1969, and again in 1970, than we did in 1968. This near-term increased production will come from our expanding Canadian facilities. At the same time, we will be pushing ahead on projects, both inside and outside of Canada, to help fill consumption needs in the longer-term future.

In 1969 we will negotiate a new contract with the United Steelworkers of America representing our hourly-paid employees in Ontario. By agreement entered into with the union in mid-February, negotiations will commence early, on March 18, almost four months before the July 10 expiration date of the present contract. As we enter the negotiation period, we are prepared to do everything we soundly can to insure that there is not an interruption of employment or production, and see no reason to expect such an interruption. At the same time, we are cognizant of the importance

of not impairing Canada's competitive position against potential external sources of nickel, or establishing a labour contract pattern which would be harmful to the Canadian economy.

Nineteen sixty-nine, then, will be another year of building for the future . . . of continued heavy investments to modernize and expand facilities, primarily in Canada, where in excess of \$150,000,000 out of a total of \$200,000,000 of capital expenditures will be made . . . of increased exploration . . . and, most importantly, increased production. Finally, despite rising costs, the expected increase in business volume should result in another year of satisfactory earnings for the Company.

BY ORDER OF THE BOARD OF DIRECTORS,

HENRY S. WINGATE

*Chairman*

## **Auditors' Report**

*To the Shareholders of  
The International Nickel Company of Canada, Limited:*

We have examined the financial statements appearing on pages 36 through 45 of this report. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of The International Nickel Company of Canada, Limited and wholly owned subsidiaries at December 31, 1968 and the results of their operations for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

PRICE WATERHOUSE & CO.

February 18, 1969

Consolidated Assets and

	1968	1967*
<b>CURRENT ASSETS</b>		
Cash .....	\$ 29,225,000	\$ 28,638,000
Government and Other Securities .....	200,126,000	69,987,000
Accounts Receivable less provision for doubtful accounts...	108,922,000	117,449,000
Inventories of finished and in process metals, and supplies...	218,955,000	211,020,000
Prepaid Expenses .....	3,348,000	6,751,000
	<u>560,576,000</u>	<u>433,845,000</u>
 SECURITIES HELD FOR PENSION PLANS .....	 8,131,000	 8,191,000
 <b>OTHER ASSETS</b>		
Miscellaneous Securities .....	24,103,000	21,134,000
Charges to Future Operations .....	5,060,000	5,000,000
	<u>29,163,000</u>	<u>26,134,000</u>
 PROPERTIES, PLANT AND EQUIPMENT .....	 1,275,500,000	 1,105,701,000
Less – Depreciation and Depletion .....	477,214,000	453,544,000
	<u>798,286,000</u>	<u>652,157,000</u>
	<u>\$1,396,156,000</u>	<u>\$1,120,327,000</u>

APPROVED ON BEHALF OF THE BOARD OF DIRECTORS:

HENRY S. WINGATE      }  
 JAMES C. PARLEE      } *Directors*

# Liabilities at December 31, 1968

EXPRESSED IN UNITED STATES CURRENCY

	1968	1967*
<b>CURRENT LIABILITIES</b>		
Accounts Payable and Accrued Expenses.....	\$ 84,567,000	\$ 67,187,000
Taxes based on Income .....	<u>45,179,000</u>	<u>45,674,000</u>
	<u>129,746,000</u>	<u>112,861,000</u>
<b>LONG-TERM DEBT</b> .....	<u>178,300,000</u>	<u>—</u>
<b>PROVISIONS FOR</b>		
Future Income Taxes .....	132,100,000	102,300,000
Pension Plans .....	8,131,000	8,191,000
Exchange, Insurance and Operating Purposes .....	<u>29,440,000</u>	<u>31,818,000</u>
	<u>169,671,000</u>	<u>142,309,000</u>
<b>SHAREHOLDERS' EQUITY</b>		
Common Shares		
Authorized 90,000,000 shares without nominal or par value.		
Issued 74,386,264 shares (1967—74,347,085 shares) .....	91,436,000	90,424,000
Capital Surplus .....	61,036,000	61,036,000
Retained Earnings and Capital Gains Employed in the Business .....	<u>765,967,000</u>	<u>713,697,000</u>
	<u>918,439,000</u>	<u>865,157,000</u>
	<u>\$1,396,156,000</u>	<u>\$1,120,327,000</u>

\*Certain items have been reclassified to conform with 1968 presentation.

The explanatory financial section on pages 39 to 45 is an integral part of this statement.  
The Auditors' Report appears on page 35.

## Consolidated Earnings for the Year Ended December 31, 1968

EXPRESSED IN UNITED STATES CURRENCY

	1968	1967
NET SALES .....	<u>\$ 767,330,000</u>	<u>\$ 713,157,000</u>
<b>COSTS AND EXPENSES</b>		
Costs .....	471,473,000	435,657,000
Selling, General and Administrative Expenses	36,573,000	33,984,000
	<u>508,046,000</u>	<u>469,641,000</u>
OPERATING EARNINGS before items shown below .....	259,284,000	243,516,000
OTHER INCOME .....	13,992,000	8,187,000
	<u>273,276,000</u>	<u>251,703,000</u>
<b>PROVISION FOR</b>		
Taxes based on Income.....	86,837,000	78,259,000
Depreciation and Depletion.....	29,255,000	26,140,000
Pension Plans .....	6,912,000	5,552,000
Interest on Long-Term Debt.....	6,527,000	—
	<u>129,531,000</u>	<u>109,951,000</u>
NET EARNINGS .....	<u>\$ 143,745,000</u>	<u>\$ 141,752,000</u>
Net Earnings per Common Share .....	\$1.93	\$1.90*
Shares outstanding at end of year .....	74,386,264	74,347,085*

\*Adjusted for 2½-for-1 split effected July 18, 1968.

## Consolidated Retained Earnings and Capital Gains Employed in the Business

EXPRESSED IN UNITED STATES CURRENCY

	1968	1967
BALANCE AT BEGINNING OF YEAR.....	\$ 713,697,000	\$ 661,049,000
NET EARNINGS .....	143,745,000	141,752,000
	<u>857,442,000</u>	<u>802,801,000</u>
DIVIDENDS PAID ON COMMON SHARES.....	91,475,000	89,104,000
BALANCE AT END OF YEAR.....	<u>\$ 765,967,000</u>	<u>\$ 713,697,000</u>

The explanatory financial section on pages 39 to 45 is an integral part of these statements.

## Explanatory Financial Section

### GENERAL

The financial statements consolidate the accounts of the Company and wholly owned subsidiaries in Canada, the United Kingdom, the United States and other countries. For convenience, comparative figures are also shown for the preceding year, and figures are stated to the nearest thousand dollars.

As in past years, the statements are expressed in United States currency, translations from other currencies having been made at applicable rates and in accordance with the Company's regular accounting practice. Current assets (other than inventories), current liabilities, securities held for pension plans and provisions for pension plans are translated at year-end rates of exchange. The translation of all other assets and liabilities generally recognizes the rates historically applicable. Income, costs and expenses are translated at average rates prevailing during each period; depreciation, depletion and inventories included in costs are translated at historical rates. Exchange adjustments resulting from the translation of items in currencies other than United States currency are applied to the accumulated provision for exchange.

### NET SALES

In 1968 net sales totaled \$767,330,000 as compared with \$713,157,000 in 1967, an increase of \$54,173,000. The increase was attributable principally to higher deliveries of Company-produced nickel and recognizes the effect of the September 1967 increase in the price of nickel; better prices also prevailed for copper and platinum-group metals.

### COSTS AND EXPENSES

In 1968 costs and expenses totaled \$508,046,000 as compared with \$469,641,000 in 1967, an increase of \$38,405,000. The higher costs were primarily attributable to increased production costs and the adverse effect of mining lower-grade ores. Selling, general and administrative expenses for 1968 include directors' remuneration of \$1,087,000, including salaries of all officers who were directors.

### OTHER INCOME

Other income included in earnings comprised:

	1968	1967
Interest .....	\$11,698,000	\$7,442,000
Dividends .....	386,000	339,000
Net gain on disposal of assets .....	1,908,000	406,000
Total .....	<u>\$13,992,000</u>	<u>\$8,187,000</u>

## WORKING CAPITAL

The increase in working capital for the year amounted to \$109,846,000, comprised of an increase of \$126,731,000 in current assets and an increase of \$16,885,000 in current liabilities. The changes in working capital are summarized as follows:

Working capital at beginning of year .....	\$ 320,984,000
Additions:	
Net sales .....	\$767,330,000
Proceeds from long-term debt .....	178,300,000
Other income .....	13,992,000
Issue of shares under stock option plan .....	1,012,000
	960,634,000
	1,281,618,000
Deductions:	
Costs and expenses, pension provision and interest on long-term debt (less \$1,234,000 of provisions for insurance and operating purposes) .....	\$520,251,000
Taxes based on income (less \$29,800,000 of the provision for future taxes) .....	57,037,000
Capital expenditures .....	175,384,000
Dividends paid on common shares .....	91,475,000
Other .....	6,641,000
	850,788,000
Working capital at end of year .....	\$ 430,830,000

## SECURITIES

Government and other securities included in working capital, which were comprised of time deposits and government and prime commercial securities maturing within 12 months, were carried at cost which approximated market at the end of each year.

Securities held for pension plans and miscellaneous securities, were also carried at cost. Market values in the aggregate were greater than cost at the end of each year. Certain government securities in the amount of \$19,702,000 maturing after 12 months, previously classified as Government and Other Securities, have been reclassified as Miscellaneous Securities.

## INVENTORIES

Inventories included in working capital comprised:

	December 31, 1968	December 31, 1967
Metals, finished and in process ....	<u>\$172,625,000</u>	<u>\$170,548,000</u>
Supplies .....	<u>46,330,000</u>	<u>40,472,000</u>
Total inventories .....	<u><u>\$218,955,000</u></u>	<u><u>\$211,020,000</u></u>

Following the Company's regular accounting practice, inventories are valued at the lower of cost or market prices; cost for metals is production or purchase cost, and for supplies is average purchase cost. Inventory quantities were adjusted from time to time throughout the year to physical stock-takings. At the end of the year there were no substantial purchase commitments at prices in excess of market levels.

## PROPERTIES, PLANT AND EQUIPMENT

Changes in these accounts during the year are summarized as follows:

	Balance at beginning of year	Additions	Retirements	Balance at end of year
Mines and mining plants ....	\$ 461,861,000	\$ 72,273,000	\$ 905,000	\$ 533,229,000
Smelters .....	325,167,000	59,543,000	781,000	383,929,000
Refineries .....	120,068,000	8,840,000	1,864,000	127,044,000
Rolling mills .....	160,465,000	21,274,000	1,443,000	180,296,000
Other .....	38,140,000	13,454,000	592,000	51,002,000
	<u>1,105,701,000</u>	<u>\$175,384,000</u>	<u>\$5,585,000</u>	<u>1,275,500,000</u>
Less—Depreciation and Depletion .....	<u>453,544,000</u>	<u>\$ 29,255,000</u>	<u>\$5,585,000</u>	<u>477,214,000</u>
	<u><u>\$ 652,157,000</u></u>	<u><u>=====</u></u>	<u><u>=====</u></u>	<u><u>\$ 798,286,000</u></u>

Properties acquired in 1918 from a predecessor company are taken at cost measured by the par value of stock issued for stock of that company; an ore body discovery is at value fixed by the Directors in 1923; properties owned by International Nickel Limited prior to its merger, January 1, 1929, are at the valuation established by its Directors and appearing in their report to shareholders for the eight months' period ended December 31, 1928; other items are at cost. Such cost in the case of the Company's mines, substantially all of which were discovered and developed by the Company and not purchased from others, represents, with relatively minor exceptions, only that part of related development and acquisition costs which was capitalized.

The established policy relative to depreciation and depletion was continued during the year and provisions were made which, in the judgment of the management, will result in accumulated provisions adequate to offset, at the expiration of the estimated economic lives of the properties, the recorded cost of the investment in properties, plant and equipment. This policy is supported by studies made periodically of such lives of the properties. The total provision for the year of \$29,255,000 includes depreciation of \$25,125,000, generally computed on a straight-line basis, and depletion of \$4,130,000 computed on a declining balance basis. At the end of the year, the accumulated provisions were \$367,626,000 for depreciation, and \$109,588,000 for depletion. Depletion is based on recorded cost, established as explained above, and does not represent the "in place" value of the ore consumed during the year or the amount by which the value of the Company's ore reserves would have decreased through operations if new ore reserves had not been proven up to replace them.

#### TAXES BASED ON INCOME

During the year \$86,837,000 was provided for taxes based on income, of which \$71,965,000 was for Canadian taxes and \$14,872,000 principally for United Kingdom and United States taxes.

The higher provision for taxes in 1968 is attributable to the reduction of tax-exempt "new mines" income in Canada, tax surcharges imposed by Canada and the United States, and also to higher earnings for the year.

As a result of tax regulations of Canada, the United Kingdom and the United States, certain timing differences exist relating to the reporting of deductions for book and tax purposes, primarily depreciation. As a result of such timing differences, taxes based on income in the Consolidated Earnings statement includes a net provision for future taxes totaling \$34,800,000, of which \$5,000,000 relates to items of a current nature.

In accordance with recommendations issued by professional accounting institutes in Canada and the United States, the Company has extended its procedure of accounting for timing differences to cover all affected transactions subsequent to December 31, 1967. The extension of this practice did not have a significant effect on current earnings, nor would the effect on prior periods have been material on a comparable basis.

The cumulative tax effect of timing differences relating to items of a non-current nature is shown separately as provision for future income taxes of \$132,100,000 in the statement of Consolidated Assets and Liabilities, while the cumulative tax effect relating to items of a current nature, the current provision of \$5,000,000 less \$3,900,000 of future tax benefits reclassified from prepaid expenses, is included in the current liability for taxes based on income.

### LONG-TERM DEBT

Outstanding long-term debt of the Company and its consolidated subsidiaries, all of which originated in 1968, consists of the following:

Debentures, 6.85%, due 1993 . . . . .	\$137,000,000
Bank Loan, 6.25% to 6.75% . . . . .	25,000,000
Other Loans, (Swiss Francs 70,000,000)	
6.25% to 6.50%, due 1970-73. . . . .	16,300,000
	<u>\$178,300,000</u>

The debentures outstanding are part of an issue of \$150,000,000 sold at par in March 1968. The balance of \$13,000,000 of debentures were delivered and payment received in January 1969. Sinking fund payments calculated to retire 76% of the issue prior to maturity are required in annual instalments of \$6,000,000 in 1979 through 1983, \$8,000,000 in 1984 through 1988 and \$11,000,000 in 1989 through 1992. Additional payments into the sinking fund, not exceeding in any year that amount required as above, may be made at the option of the Company. Debentures retired through the operations of the sinking fund are callable at par. The Company has the option to make further retirements at redemption prices ranging progressively downward from 106.85% currently to 100% in 1990.

Under the terms of a credit agreement entered into during the year, a subsidiary of the Company is entitled to borrow a maximum of \$75,000,000 against 90 day revolving credit notes having a final maturity not later than December 31, 1970. The notes bear interest at the prime commercial rate in New York, existing at the time of each borrowing, and a fee of  $\frac{1}{4}$  of 1% per annum is payable on the unused portion of the total commitment. At December 31, 1968, \$25,000,000 of such notes were outstanding. On December 31, 1970, the Company at its option may convert the commitment, in whole or in part, to term notes payable in nine equal consecutive semi-annual instalments, commencing June 30, 1971, with interest at  $\frac{1}{4}$  of 1% per annum above the prime commercial rate in New York in effect throughout the period of the term loan.

On December 23, 1968, a line of credit in the maximum amount of \$70,000,000 was authorized by the Export-Import Bank of the United States, none of which was outstanding at December 31, 1968.

### PENSION PLANS

In addition to assets held in Trust Funds by Trustees under Company pension plans, the Company held \$8,131,000 of securities at the year end, representing the amount set aside for pension plan benefits payable directly by the Company. A summary of pension plan transactions during the year follows:

Balance at beginning of year . . . . .	\$ 8,191,000
Add: Provision from earnings . . . . .	6,912,000
	<u>15,103,000</u>
<b>Deduct:</b>	
Contributions paid to Trustees (actuarially computed) . . . . .	\$ 6,463,000
Benefits paid directly by the Company . . . . .	509,000
	<u>6,972,000</u>
Balance at end of year . . . . .	\$ 8,131,000

The Company's pension plans cover substantially all of its employees. Pension plan costs arising from past service in the aggregate have been provided for in full.

## PROVISIONS FOR EXCHANGE, INSURANCE AND OPERATING PURPOSES

Changes in these provisions during the year were as follows:

Balance at beginning of year .....	\$31,818,000
Add provision for:	
Self-insurance .....	\$ 1,000,000
Operating purposes .....	234,000
	<hr/>
Deduct: currency exchange adjustments .....	33,052,000
	<hr/>
The year-end provisions are:	3,612,000
Self-insurance .....	\$15,000,000
Operating purposes .....	11,209,000
Exchange .....	3,231,000
	<hr/>
Balance at end of year .....	\$29,440,000
	<hr/>

## COMMON SHARES AND CAPITAL SURPLUS

The Key Employees Stock Option Plan, ratified by shareholders at the Annual Meeting on April 24, 1957, authorized the granting of options on 1,750,000 unissued common shares (after 2½-for-1 split in 1968) at prices not less than 95% of the fair market value on the day the options were granted. The options are exercisable in instalments beginning not earlier than one year after date of grant over a period not exceeding ten years from the date of grant. During 1968 options were exercised in respect of 39,179 shares, for which the Company received \$1,012,000, which has been credited in full to the common shares account, and options for 1,101 shares expired. As of December 31, 1968 options for a total of 1,466,139 shares had been exercised, and 281,660 shares (including 116,887 shares for officers) were subject to outstanding options as follows:

Date of Grant	Option Price Per Share	Shares for Officers	Total Shares
November 1959	\$18.80	1,000	1,250
April 1960	19.90	5,750	6,000
March 1961	25.20	—	9,508
November 1961	29.00	43,325	86,542
December 1962	23.40	1,562	22,480
August 1966	32.70	65,250	155,880
		<hr/>	<hr/>
		116,887	281,660
		<hr/>	<hr/>

This plan was terminated in 1968 except as to options then outstanding, and no further options may be granted thereunder.

The Key Employees Incentive Plan, ratified by shareholders at the Special General Meeting on July 17, 1968, authorizes the granting of options to purchase up to 1,000,000 common shares at prices not less than 100% of their market value, pursuant to the Plan, on the day the option is granted. The Plan provides that no

shares subject to option shall be purchasable prior to the expiration of one year after the date of grant nor after a period not exceeding ten years from the date of grant. No options were granted in 1968. The Plan, which is administered by a Committee of three or more Directors who are not eligible to participate in the Plan, also authorizes awards of supplemental compensation in respect of each year beginning with the year 1968 up to an aggregate amount not in excess of the "Incentive Fund" for such year. The amount of the Incentive Fund for each year shall be determined by the Board of Directors of the Company from time to time prior to the end of the following year, provided that the amount so determined shall not exceed an amount equal to 2% of the sum of the consolidated net earnings and provision for taxes based on income as set forth in the financial statements in the Annual Report of the Company for that year, plus an additional amount equal to any excess of the Incentive Fund for the preceding year over the amount of the awards made for that year, except that such additional amount shall in no event exceed the total amount of awards for the preceding year. Such awards may be made in, or in commitments to deliver, cash, shares of the Company, "share units" or such other kind or form of compensation as may, in the judgment of the Committee, be best calculated to further the purposes of the Plan, all on such terms and subject to such conditions as the Committee may determine.

Capital surplus was unchanged during the year. It includes \$11,664,000 representing the amount received in 1930 for common shares in excess of the capital value assigned thereto, this amount being "distributable surplus" as defined by the Canada Corporations Act.

## Fifteen Year Review

Year	Net Earnings		Common Dividends		Income Taxes	Depreciation and Depletion
	Amount	Per Common Share*	Amount	Per Common Share*		
1968	\$ 143,700,000	\$ 1.93	\$ 91,500,000	\$ 1.23	\$ 86,800,000	\$ 29,300,000
1967	141,800,000	1.90	89,100,000	1.20	78,300,000	26,100,000
1966	118,200,000	1.59	83,100,000	1.12	69,000,000	26,200,000
1965	143,800,000	1.94	90,300,000	1.22	93,500,000	26,500,000
1964	135,800,000	1.84	81,300,000	1.10	66,700,000	27,500,000
1963	106,300,000	1.44	66,300,000	0.90	43,600,000	26,200,000
1962	94,200,000	1.28	55,900,000	0.76	37,400,000	24,300,000
1961	88,800,000	1.21	46,900,000	0.64	60,900,000	19,900,000
1960	80,700,000	1.10	44,500,000	0.61	60,200,000	15,500,000
1959	85,200,000	1.16	43,800,000	0.60	58,800,000	14,600,000
1958	39,700,000	0.54	37,900,000	0.52	28,300,000	13,400,000
1957	86,100,000	1.18	54,700,000	0.75	56,800,000	20,300,000
1956	96,300,000	1.30	54,700,000	0.75	61,000,000	19,900,000
1955	91,600,000	1.23	54,700,000	0.75	60,200,000	19,100,000
1954	65,300,000	0.87	42,300,000	0.58	43,400,000	17,800,000

\*As adjusted to reflect the split of shares on a 2-for-1 basis in 1960, and on a 2½-for-1 basis in 1968.

## Financial and Operating Results

Capital Expenditures	Ore Mined (DRY SHORT TONS) †	Nickel Deliveries (POUNDS)	Copper Deliveries (POUNDS)	Platinum-Group Metals and Gold Deliveries (TROY OUNCES)	Exploration Expenditures
175,400,000	24,300,000	480,800,000	314,200,000	440,900	\$ 17,000,000
145,700,000	19,900,000	463,500,000	310,900,000	475,600	13,300,000
73,000,000	17,100,000	500,200,000	293,000,000	500,900	11,700,000
62,700,000	19,300,000	493,000,000	275,900,000	510,800	12,300,000
44,400,000	16,100,000	444,200,000	286,500,000	544,800	7,600,000
36,000,000	13,300,000	350,700,000	253,600,000	439,400	6,400,000
61,000,000	13,500,000	318,200,000	267,300,000	410,800	5,900,000
46,000,000	17,200,000	372,500,000	268,700,000	443,000	7,400,000
76,000,000	16,500,000	351,900,000	292,500,000	409,400	8,900,000
66,900,000	15,100,000	317,000,000	252,500,000	420,900	8,000,000
54,400,000	9,300,000	205,800,000	210,600,000	189,400	7,400,000
43,900,000	15,800,000	290,100,000	280,800,000	382,800	8,900,000
23,000,000	15,300,000	286,100,000	271,300,000	411,100	8,200,000
26,900,000	14,000,000	290,500,000	263,200,000	487,700	5,200,000
22,300,000	14,200,000	282,000,000	253,300,000	300,700	5,300,000

†Tons adjusted from former wet to present day dry short ton basis.

## Trust Funds Retirement System and Other Pension Plans

There are five irrevocable Trust Funds in Canada, the United States and the United Kingdom to implement the Retirement System and the other pension plans for the Company's employees. While the accounts of these Trust Funds are separate and distinct from the accounts of the Company and its subsidiaries, a summary of the audited accounts of the five funds appears in the ensuing paragraph for general information purposes.

At the beginning of the year Government bonds and other marketable securities, at cost, and cash and other assets in the hands of the Trustees aggregated \$189,269,000. During the year total contributions paid to the Trustees by the Company and employees were \$6,634,000, income from investments was \$10,213,000, and Retirement System and other pension plan benefits of \$7,485,000 were paid from the Trust Funds. Accordingly, on December 31, 1968 the Trustees had assets in hand of \$198,631,000. These figures are expressed in United States currency.

At February 18, 1969 the Trustees of the three Canadian Trust Funds and of the United States and British Funds were:

### CANADIAN FUNDS

G. Arnold Hart, Montreal, P.Q.  
Allen T. Lambert, Toronto, Ont.  
R. Samuel McLaughlin, Oshawa, Ont.  
H. C. F. Mockridge, Toronto, Ont.  
E. C. Patterson, Bedford, N. Y.  
F. M. A. Noblet, Darien, Conn.

### UNITED STATES FUND

E. C. Patterson, Bedford, N. Y.  
William C. Bolenius, Cutchogue, N. Y.  
H. C. F. Mockridge, Toronto, Ont.  
J. C. Traphagen, West Nyack, N. Y.  
F. M. A. Noblet, Darien, Conn.

### BRITISH FUND

International Nickel (Retirement System) Trustees Limited,  
London

**ANNUAL MEETING**—The Chairman will make an oral report to shareholders at the Annual Meeting which will be held in Toronto, Ontario, on April 23, 1969. The Chairman's Address will be printed and mailed to the shareholders.



AR37

The  
International Nickel  
Company of Canada  
Limited

Annual Meeting

April 17, 1968 • Toronto • Canada

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Address to Shareholders by HENRY S. WINGATE  
Chairman of the Board



The  
International Nickel  
Company of Canada  
Limited

Annual Meeting

April 17, 1968 • Toronto • Canada

Address to Shareholders by HENRY S. WINGATE  
Chairman and Chief Officer

*On peut se procurer cette plaquette  
en français en s'adressant au  
Secrétaire,  
The International Nickel Company of Canada, Limited  
Toronto-Dominion Centre, Toronto 1, Ontario, Canada*

**S**ince we were here together a year ago, your management has dealt and continues to deal with a most unusual number of situations. The number is impressive of itself, but the variety and scope even more so. Let me list a few:

—We have moved ahead rapidly in expanding our Canadian production facilities. We plan to spend in Canada \$160,000,000 on them this year—and about the same in 1969.

—We have gone into debt for the first time in 32 years and have raised \$150,000,000 by the successful sale of debentures.

—We have researched and made public a whole new family of superplastic alloys. Despite the current tightness of supply, we continue without pause to do the basic work which will allow us to develop future expanded markets for nickel.

—After competing with a number of companies from different countries, an understanding was reached with the Indonesian Government awarding to us the right to negotiate a contract to investigate and if possible to develop the nickel deposits of Sulawesi in Indonesia.

—We have read, and comprehended, a most sweeping proposal, announced shortly before our last meeting, for the almost complete redirection of Canada's tax system, and we have, I believe, produced and submitted a most comprehensive, pragmatic and constructive commentary on it.

—We have formed and made a start in staffing a new organization of our own in France to pursue our interests

in the proposed new French-Canadian company to develop New Caledonia's nickel ores. Drilling work on the island in behalf of that company is underway.

—We have experienced the devaluation of the pound sterling and responded to all the pricing and monetary ramifications it has brought about. The Company suffered no losses as a result of the devaluation.

—We have started work on modernization of our precious metals refinery near London.

—We have had a highly successful year of operations at the new modernized carbonyl line at the Clydach, Wales, nickel refinery.

—We have brought forward our development of a new mine in Shebandowan, Ontario, to the point where we are prepared today to announce publicly our plans to put it into operation.

—We have worked hard to minimize hardships to our customers by allocating our available nickel as fairly as we know how. But this is a palliative at best. The only real answer lies in having enough nickel to meet all the requirements of all our customers—and this we expect to do.

—We have had teams working with governments or official bodies in many places, including: Perth, Australia; Sudbury; Guatemala City; Ottawa; Winnipeg; Hereford, England; Paris; Toronto; Washington; Burnaugh, Kentucky; London; Ely, Minnesota and elsewhere. Our goal in all of these efforts with government bodies is to find ways to conduct our business effectively and profitably, and at the same time, to be a contributing and welcome factor wherever we operate.

—We have authorized and started to build new \$30,000,000 facilities for vacuum induction melting and hot extrusion of tubing at our Burnaugh, Kentucky, plant. We first launched this special-purpose production plant in 1964.

—We have made operative two new additions to our process research capability—a new laboratory at Clydach, Wales, and a process research station at Port Colborne, Ontario.

### ***New Situations and New Approaches***

Of course, there is nothing basically new in these types of situations. We have negotiated with governments and official bodies before. We have expanded our facilities before. We have long developed new alloys and done many of the activities I have outlined.

What is new is the pace, volume and variety. The impetus behind them is, as I said in the Annual Report, “rising demand, rising production—including production outside of Canada—the utilization of lower-grade ores, the increasing importance of extractive metallurgical techniques and the need for very large capital investments.” None of these are sudden or new factors. They are trends that have been mounting and that will continue in the future.

But their impact is very real, and it is different—not just an increasing scale over what we have done before. The major new factor is the coming of production outside of Canada. We have long been a multinational marketing organization; we will soon be a multinational production organization. This will call for new organizational

approaches rather than just an enlargement of the old. Our goal remains the same—to extract metal from the earth and turn it into forms that fill man's needs; but the new problems and the means of solution in organizational terms require new approaches. We are actively evolving these with key employees throughout the organization.

We are accelerating the work we are already doing to expand and use more efficiently our managerial talents. This means moving people to positions of increased and better defined responsibilities, and in some cases, attracting talent from outside the organization. But the need is not only for more, but for an increased variety of talents, and increasingly for organizational relationships that will allow these talents to be effectively and directly brought to bear on the various situations with which we must deal. We are evolving—and will continue to evolve—these relationships so that the very real talents that are in our organization today can be utilized to their fullest, and so that we can maintain effective policy control without stifling initiative and drive. Implicit in such efforts must be a widely held understanding of Company objectives to act as a guide to decision making and for actions in the many different fields and localities in which we operate.

### ***Financing for Expansion***

Now, if I may, I would like to comment specifically on a few of the items I have mentioned—and on some I have not. Firstly, our outside financing. This financing was necessitated by our larger than ever expansion program in Canada and the United States, but primarily in Canada. Our capital expenditures have increased

each year for the last five years. In 1967, they were \$146,000,000, and in 1968 and 1969 together they could be on the order of \$400,000,000. In the past we have financed our capital expenditures out of internally generated funds, and at the same time, paid dividends to shareholders averaging, in recent years, over 60 per cent of our net earnings. These internal funds were not sufficient to meet our capital requirements, and thus the outside financing. Because of the highly uncertain world and U.S. monetary situation, the debentures were priced to yield 6.85 per cent, which is historically a high yield, but I am glad to say they sold well and rapidly.

If, as confidently expected, we continue large capital expenditures in the future, we must anticipate doing further financing. Its nature and timing will depend on how our requirements develop and on our assessment of the available resources of the world's financial markets in the future.

### ***Growing Production Capability***

Last year I outlined, in what I said here, the Company's strong contribution to Canada's economy. This contribution will continue, for while it is clear that in the future we will have production outside of Canada, it is also abundantly clear that Canadian ores will be the base of our production for many, many years to come. Our current investment in Canadian facilities is designed to sustain existing production and increase our productive capability, so that in the latter part of 1971 we will be able to deliver from our Canadian facilities at a rate in excess of 600,000,000 pounds of nickel per year. It involves nine new mines and related surface facilities and

will represent an investment in Canada alone this year and next of more than \$300,000,000. This new investment is one measure of the increase in our contribution to Canada's economy.

The growth in our contribution, of course, goes beyond the new capital investment. It will mean increased employment, greater activities for all the many supporting secondary and service industries, and more taxes, as well as a larger contribution to Canada's balance of payments as production and export shipments of our products increase. Our ability, based on our record and our prospects of financial strength, to raise in the U.S. market the needed capital, is an indispensable cornerstone in our project to expand our Canadian facilities and thus to do our part in the further strengthening of the economy of Canada.

We are involved in exploring or developing properties in Australia, the British Solomon Islands, Guatemala, Indonesia, Minnesota and other parts of the world. While we are engaged in this far-flung, worldwide work, it is perhaps possible to lose perspective regarding the exploration we are doing within Canada. Although our exploration expenditures outside Canada were the largest in our history, and some 25 per cent of the total, our exploration in Canada was very large—in fact, comparable to any previous year.

### ***New Mine at Shebandowan***

A new addition to our expansion program is our plan to open a mine in Shebandowan, Ontario. This new mine will represent a total investment of some \$31,000,000 and

is the result of \$4,350,000 in exploration work. The ore body lies partially under the southwest corner of Lower Shebandowan Lake. Drilling has so far delineated a medium-size ore deposit containing both copper and nickel, and comparable in grade to that which we are now mining at our Sudbury operations. Drilling operations are continuing to extend the indicated potential reserves. We will know more about them when we have extended our drilling downward from the 1,000-foot level of the present shaft.

We will very shortly commence sinking a production shaft to the depth of about 2,000 feet on the south shore of the lake. This shaft will be located about one mile from the present exploration shaft. Our plans call for a mill, close to the mine, from which dried concentrates will be hauled by truck some 10 miles to the rail point of Shebandowan and then shipped to the Sudbury area for processing. We estimate that three years will be required to sink the production shaft to the necessary depth and to construct the mill. At the end of that time, we would expect full operation involving some 400 to 500 employees. During the construction period some 300 men will be employed by the construction companies involved.

It is possible that we may have to dam a small portion of the lake. We have been in touch with officials in the Ontario Water Resources Commission and the Ontario Department of Lands and Forests about our plans, and will periodically keep those involved in the area informed. In fact, at this very moment, two of our people are meeting with a group of officials and prominent people of the area to discuss our plans with them.

## **Tax Incentives and Economic Growth**

Inherent in these expansion plans—indeed in all the development of our properties over the years—have been the stable and predictable tax incentives that Canada has for many years provided for mining companies. These have been a vital element in the growth of Canada's extractive industries and in their unusual contribution to Canada's economic growth. They continue to be so.

Major elements of the incentives have been brought under question by the Carter Commission's proposals. Since I talked with you last, we have not only read and digested the Carter Report, a considerable feat, I might add (in total some 2,575 pages, plus the pertinent background studies), but have submitted an extensive brief commenting on it. To prepare this brief we put together a team representing many talents and including a number of distinguished consultants. This examination led us to question the basic philosophy of the report in relation to Canada's needs. More specifically, we found ourselves in strong disagreement with the Commission's assumptions regarding the mining industry and the results that it predicted would flow from the proposals it made affecting the industry. We feel its proposals to eliminate completely the long-standing incentives for the mining industry would be enormously damaging, not only to the industry, but to Canada's economic growth, and in the long run would result in less, not increased, tax revenues from the industry.

We are most hopeful that our suggestions and comments are being heeded and have proved useful to the government and that the tax provisions we will be

10 Carter - if incentives reduced  
Inco in position now to shift emphasis  
in future to operations outside Canada - of profit

operating under in the future will continue to encourage the type of development and expansion we have seen in the past, and which is well illustrated by our present Canadian expansion programs. The relevance of taxation in any country is especially critical today when companies such as ours are obliged to resort to foreign financing to pursue their hopes for expansion, and are exploring and developing deposits in many parts of the world, and, therefore, must weigh possible alternative investments.

In August of last year the Ontario Committee on Taxation published its report. Early this year we submitted our comments on it. Our interest is obvious, for we pay approximately 60 per cent of the mining taxes in the Province. Overall, we found many of the Committee's proposals practical and imaginative. However, we found ourselves in disagreement with some of its recommendations, particularly its proposed taxation of the mining industry. In our submission we suggested certain alternative proposals—particularly a proposal to subject surface processing facilities to municipal property taxes. Heretofore most of these facilities have been exempt. This proposal of ours, designed to assist the municipalities in which we operate, has understandably attracted considerable attention and interest.

In all these taxation matters—and they are not confined to Canada—I would stress that we do not oppose change as such, nor is it our purpose to avoid paying our fair share of the costs of government. What we strive for is recognition that taxation programs affecting the mining industry must be formulated around the realities of the industry—particularly the unique risks involved in ex-

ploration and the long-range and very large capital investments that must be made. Because of the plain fact that the extraction industry can and does make highly important contributions as a stimulator of the economic growth of the area or the country in which it operates, our belief is that taxation programs should consciously be shaped to encourage the industry's growth. Such a tax policy will not only produce wide benefits in many direct and indirect ways, but will also generate tax revenues for the areas and the countries involved far larger than under a policy not shaped to stimulate growth.

### ***Projects Outside of Canada***

The past few months were highly significant in terms of prospective longer-range production programs outside of Canada. The understandings reached for exploration and, to the extent possible, the development in New Caledonia and Indonesia were important initial steps toward major increases in the world's supply of nickel. I can add that significant progress, and much of it since we gave notice of today's meeting, was also made in our arrangements with the Guatemalan Government for the construction of mining and transformation facilities capable of having Guatemala enter the ranks of major nickel producers. Work proceeded also in the hope of our being able to develop our Minnesota copper-nickel leases. While a great deal remains to be done on each of these projects, and the prospects for no one of these can be predicted with certainty, we are determined that production from one or more of these will be making important contributions to the world's nickel supply in the first half of the 1970's.

Our near-term expansion of production capability based on our Canadian properties, and our longer-term expansion based on new production facilities outside of Canada and within its borders, mean that we will be in the position in the future of being able to meet our customers' orders for nickel. We are today producing more nickel than ever before, and our production will rise further this year, particularly in the second half of the year.

While we avoid making forward earnings predictions, it is a fact that we expect increases in our nickel production this year. This should be a helpful force in the efforts of our entire organization to achieve for 1968 a higher record of earnings than in 1967.

THE INTERNATIONAL NICKEL COMPANY OF CANADA, LIMITED  
(As of April 17, 1968)

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